Royal Navy Fast Minelayers

The story of a classic Royal Navy type, with modelling ideas by **Ian M. Fleming**

Above: *A fine view of* Manxman *in the British Pacific Fleet in mid-1945. Note white topmasts, boats apparently in dark grey, and dark grey (almost black) canvas blast bags and back curtains on the 4 inch mounts (IWM-A29617).* **Bottom of page:** Ariadne *when new in 1943 (IWM-A28827).*

Three of these classic ships, *Abdiel, Manxman* and *Latona,* were ordered for the Royal Navy in 1938, another, *Welshman,* the following year. When the war was at its darkest two further orders were placed, for *Apollo* and *Ariadne*. None survives now; even the veteran *Manxman* has been scrapped. Some were lost when nearly new: *Abdiel* to a German mine after laying over 2000 of her own, *Welshman* to the torpedoes of *U-617, Latona* to bombs. She was running troops and stores from Alexandria to Tobruk at the time, and had never yet laid a mine.

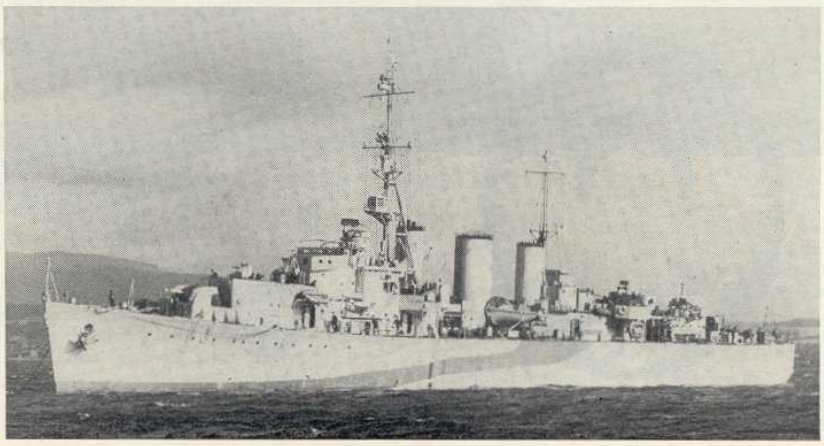
Latona's fate emphasises the difference between the purpose for which these ships were designed and the use to which they were actually put. On a hull similar to that of a large destroyer, the class had an enclosed deck under the flush main deck on which were stowed up to 156 mines, carried by rails to a pair of doors in the quarters of the ship. Beneath that deck lay the kind of power plant normally used to drive a warship three times the size. The top speed of these ships in service was at least 36 knots; more has been claimed for them, but not proved. Myth must give way a little. But there is no doubt that they *were* fast — at the time, said to be the fastest ships in the world. The idea was to make surprise runs into enemy waters, lay a minefield, and still survive. No other ship had that capability.

Precisely because of their speed and their carrying capacity, and because they carried their own cranes and derricks, all of the first four found themselves racing along the Mediterranean with their lower decks laden, not with mines, but with provisions and sometimes troops. Frustrating as this was to the planners of minelaying operations, it gave the greatest joy to the long-suffering Maltese, as well as to the defenders of Tobruk. The busy lives of these fine ships may be illustrated by the career of *Manxman* during her first commission under Captain (later Rear-Admiral) R. K. Dickson, and wargamers may find stimulating this account of what can be done with such a ship — and such a commander!

A month after her acceptance on June 7, 1941, *Manxman,* in company with the cruiser *Edinburgh* and other warships, left for Malta carrying troops and stores at top speed in the face of intense enemy opposition (Operation 'Substance'). Almost directly on her return to Gibraltar *Manxman* embarked troops and made a lone dash back to Malta — Operation 'Style' — and then returned to her base: Kyle of Lochalsh, on the rugged coast opposite Skye; to the Navy, simply 'Port ZA'. There she was prepared for Operation 'Mincemeat', of which more later. In September she laid a minefield off the Norwegian coast, and spent the rest of that year and part of 1942 laying mines off northern France as part of the blockade of the *Scharnhorst* and *Gneisenau* in Brest, sometimes joined by *Welshman*: together the two laid twelve fields in a fortnight. *Manxman* had one relief from that work: running explosives to Gibraltar and returning with the survivors from *Ark Royal*; also on board were diamonds taken from German agents attempting to reach South America.

After laying a defensive field near Aberdeen, *Manxman* was sent east in April 1942, arriving at Kilindini in May. There, Operation 'Cobra' was proposed: to lay minefields among the Andaman Islands against Japanese shipping. The problem, however, was that to lay a minefield there at night meant a daylight passage both ways under enemy-controlled airspace; at top speed *Manxman* had insufficient range, and at economic speed the risk was greater. Dickson suggested sailing most of the distance by night, laying up for the day, and mining during the following night. While laid up, the ship would be disguised — with nets, foliage and bamboo poles — as a tropical island. No effort was spared in acquiring the requisite materials, and the camouflage was practised, but in the event Operation 'Cobra' did not take place. Wargamers may have hours of fun working out what *might* have happened!

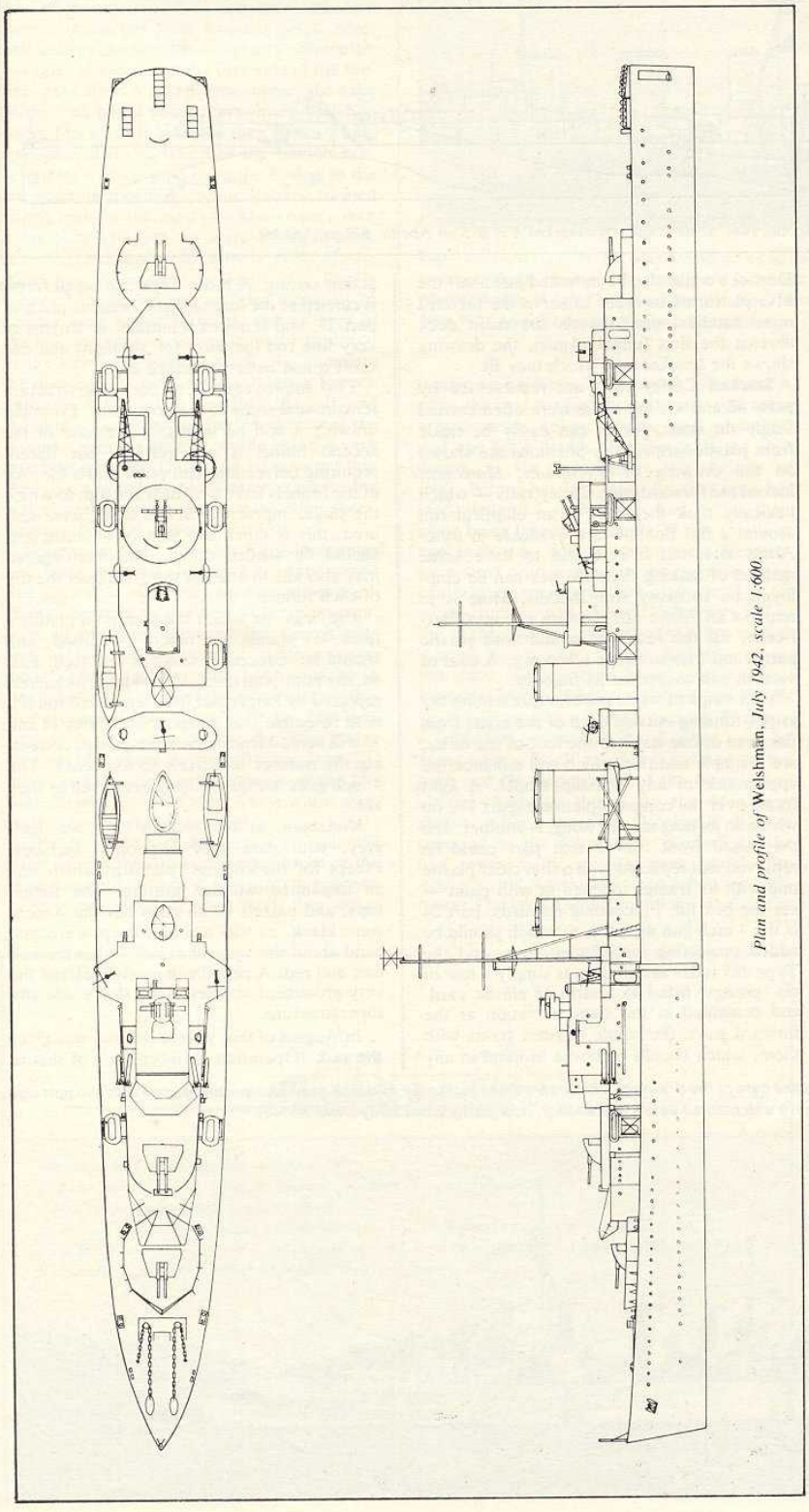
In September 1942 *Manxman* took part in the capture of Madagascar from the Vichy French. To her was assigned Operation 'ESME (B)', the capture of the sugar-growing island of Nossi Be by Royal Marines carried and supported by her; this was achieved without much opposition. She then landed Marines and South African troops on



Madagascar to cut off the French retreat — Operation 'Backside', which was also completely successful.

Two months later *Manxman* ran supplies again from Alexandria to Malta, which had received none by sea since the 'Pedestal' convoy in August. *Manxman* had been cheered by the Maltese in 1941; that was nothing to this reception. 'When you see women actually kneeling on the shore and holding out their children to you in their arms,' wrote Dickson in a letter to Admiral Leatham at Malta, 'it gets you.' That is a healthy reminder that the war consisted of a great deal more than the hardware we model.

Shortly afterwards *Welshman* steamed into the Grand Harbour on a similar mercy errand, and *Manxman* left for Gibraltar, loaded now with mines. After calling at Algiers she was hit — without Asdic warning — by a torpedo which struck in the worst possible place, near the bulkhead dividing the engine room from the generator compartment, flooding both. No further attack was made while she lay stopped, the submarine being discouraged by the ship firing HE shell into the water. Eventually *Manxman* was towed to Gibraltar. That was on December 1, 1942; it was well into 1945 when she returned to service. She never laid mines again; after various other duties (see January 1979 issue) she was broken up in 1971 following a fire on board.



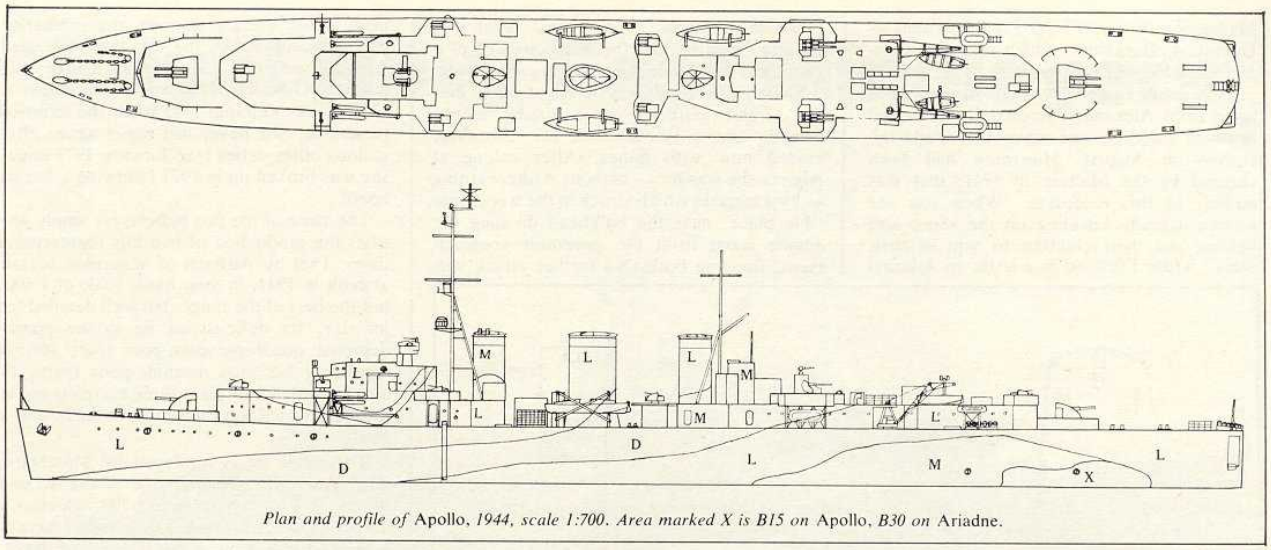
Plan and profile of Welshman, *July 1942, scale 1:600.*

The fame of the fast minelayers amply justifies the production of two kits representing them. That by Airfix is of *Manxman* herself as built in 1941, in their usual scale of 1:600; not the best of the range, but well detailed for its size. Its deficiencies lie in the poorly depicted quadruple pom-pom (part 46), at quadruple 0.5 inch machine-guns (parts 14 and 15, which only have three barrels); and at the stern which lacks the doors at the business end!

The other kit is produced by Matchbox, and represents *Ariadne*, one of the second group, in 1944. Its scale is 1:700, which is a surprising amount smaller than 1:600; there is a marked reduction in the fineness of detail, for example of the anchors, and of the screens around 'X' gun. Here one has to aim for effect rather than delicacy, and it is up to the individual to work out his own style of painting and adding details. For example: it is a lot neater, if not strictly accurate, to paint only the top of details such as the breakwater, but not their sides; while the guns and masts invite improvement with fine rod and deft fingers. The drawings, and the excellent artwork on the boxlids of both kits, will suggest other possibilities.

Another question raised by the Matchbox kit is that of display. Only the hull above the waterline is provided, which at once suggests a sea setting; but unless your 'sea' is a flat calm (as the part of the North Sea which my window overlooks often is, and then it is a warm blue in colour), parts of the underwater hull will need to show, in the troughs of the waves. A little Plasticene packed in at the appropriate points, carefully bonded in to follow the hull form, and suitably painted, will solve this. My model represents *Apollo* post-war, and so has a light grey hull and superstructure and dark green decks. With deck detail picked out neatly in light grey, the contrast produces a handsome style: the model is then mounted on a clear plastic plate 10 inches by 2 inches — in fact the kind that protects the living-room door from your fingerprints. I usually set a full-hull model in a sea made of Polyfilla spooned into a simple rimmed wooden base and caressed into the desired formation with the fingers. When almost dry, this is painted greenish-blue (more green at the peaks of the waves), but the ship's wake is left white; and finally gloss-varnished. Such a setting, if used for the *Manxman* kit, could employ a good bow wave and plenty of 'white water' in the wake to represent the ship at high speed.

There are several improvements that can be made to the Airfix kit; the most obvious is to supply the hull with the minelaying doors omitted by Airfix. These opened by sliding inside the hull plating and frames, and were therefore recessed; they must be carefully marked out, and holes drilled and enlarged to the correct outline. Plastic card, curved to shape, is then inserted. If desired, they could be shown in the open position (that is, withdrawn to the forward edge of their openings), and the end of the mining deck portrayed. The mines were about four feet long, somewhat less in diameter, of elongated spherical form. Each sat, tilted forward, on its sinker, which was a cube of about three feet side; the whole ran on rails to the stern, out through the



Plan and profile of Apollo, *1944, scale 1:700. Area marked X is B15 on* Apollo, *B30 on* Ariadne.

doors, over a roller on the short extension of the mining deck outside the doors (which also must be added to the Airfix kit) — and thence to its business. The doors measured 7 feet by 4 feet and their inboard edges were 8 feet apart. (In the Airfix scale, a handy rule is that 1 mm = 2 feet.)

Possible additions to the deck and superstructure detail are many; it is up to the individual to add these according to his patience and confidence, or to omit some as desired. The breakwater before 'A' gun should be continued aft as a screen for that gun; it is stiffened by triangular fillets on its outer sides, as shown on the drawing. The shield (of 'coal-shovel' form) projecting from 'B' gundeck (part 11) is well moulded, but requires the addition of two plates on its underside, as drawn. On the searchlight platform (part 64) a screen 4 feet (2 mm) high should be added right round its edge, a small gap being left in the centre of the fore side where a ladder descends to the main deck. The projecting platforms (on part 11) for the 0.5 inch MGs were supported from the main deck by three slender frames on each side, which can be added. From between the second and third of these large waste chutes descend nearly to the waterline: a pity, as they rather spoil the ship's otherwise good looks. All of these may be fabricated from plastic card.

Parts 12 and 13 are paravanes, used for mine*sweeping*. Another pair, without locating lugs, should be made from rod and card to the same pattern, and stowed on the deck just above the kit parts. These paravanes were hoisted out by derricks mounted below them and hinged at the aft end; refer to the drawing. Derricks could also be mounted just abaft the MG platforms in order to serve the forward mine hatches, moulded on the main deck abreast the first funnel. Again, the drawing shows the bracket into which they fit.

Stacked Carley rafts are represented by parts 42 and 43, but these were often carried singly on skids, which can easily be made from plastic strip. Their positions are shown on the drawing of *Welshman*; *Manxman* lacked the forward pair. Carley rafts — which basically took the form of an elliptical rim around a flat floor — are available in other Airfix kits, but it is useful to have some method of making them as they can be employed on so many ship models. Mine is to impress an Airfix raft, bottom up, into Plasticene, fill the resultant mould with plastic putty, and trim to shape when dry. A coat of varnish will overcome its fragility.

Thin strips of white paper, representing the gripes running outside each of the boats from the head of one davit to the foot of the other, are a simple addition which will enhance the appearance of any warship model. A light frame over the compass-platform (part 17), on which an awning may be hung, is another; and the raised front rim of that part could be removed and replaced with a thin clear plastic one with its frames touched in with paint — see the box lid. Proceeding upwards, part 24 is the 4 inch gun director, to which should be added projecting rangefinder arms, and the Type 285 radar aerial. This is simply a row of six 'prongs' fitted to a strip of plastic card, and cemented at the same elevation as the forward guns; the whole director trains with them, which should be borne in mind in any action setting. A radar Type 286 aerial frame is carried at the fore topmast head, in place of part 27, and requires a number of lengths of very fine rod (or wire, for strength) and due care; it had better be added last!

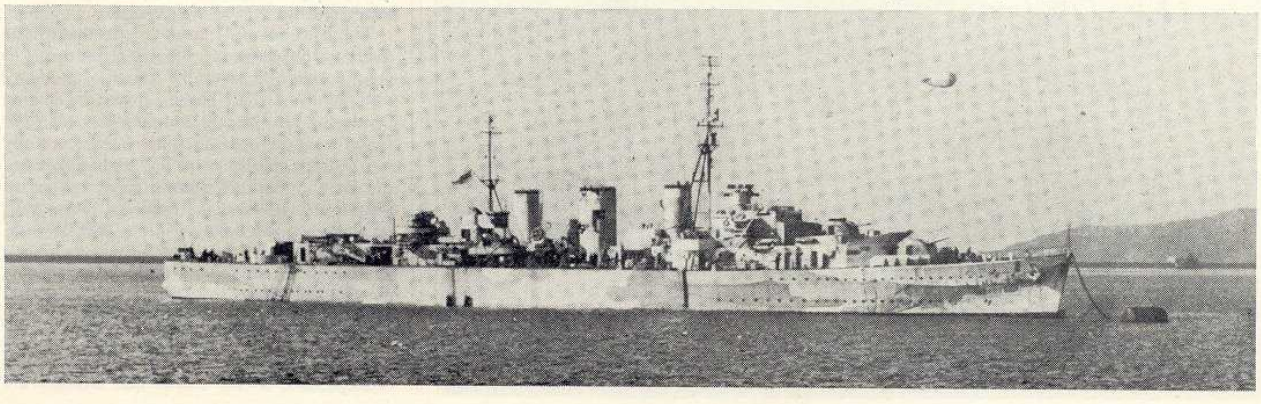
Two improvements to the superstructure remain, and some to the armament. From the drawing it will be seen that the base of the second funnel is not vertical, but flared, requiring correction with putty and a file. All of the funnels have a rib near the top, to which the stays, impractical in this scale, were secured; this is much too heavily moulded and should be sanded down. The fine-fingered may also like to attempt the grille over the top of each funnel.

The 'legs' on which the pom-pom platform (part 45) stands are much too broad, and should be reduced in width or replaced. Part 46, the pom-pom itself, should have its barrels replaced by longer and finer lengths of rod if it is to resemble that weapon; and parts 14 and 15 will benefit from similar treatment, correcting the number of barrels to four each. The 4 inch guns are quite nicely portrayed as they are.

Manxman, as delivered in 1941, was light grey, with dark grey horizontal surfaces, except for the compass-platform which was an unpainted wooden grating. The funnel tops, and barrels of all guns but the 4 inch, were black, as was a 6 foot deep horizontal band about the waterline; below that the hull was dull red. A pencil will nicely pick out the very prominent scuttles in the ship's side and superstructure.

In August of that year *Manxman* was given the task (Operation 'Mincemeat') of mining

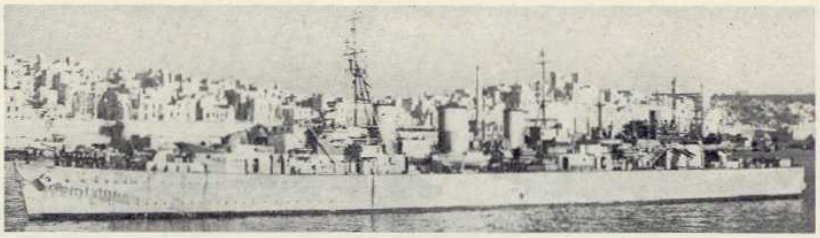
HMS Welshman *in camouflage in early 1942 (ie, before the date of the drawing). Colours are white, light grey, mid blue-grey, and (probably) dark blue. No port side view has been found, however. Light grey false bow wave was painted below the anchor, now partly worn away (IWM-A6043).*



the approaches to the Italian naval base of Livorno on the Gulf of Genoa; and since this entailed a daylight passage to the north of Corsica, where normally no British ship would venture, she was disguised as the Vichy French cruiser *Léopard*. The two ships were of similar size, and both had three funnels; but whereas *Manxman's* were vertical, and her stem and stern nearly so, *Léopard's* rig was heavily raked. Within 24 hours, as she lay at Kyle of Lochalsh, the disguise was completed — not without the use of a great deal of imagination! A dummy bow and stern were constructed from wooden poles, wire, and canvas, to give the necessary silhouette; triangles of canvas on the fore side of the funnels gave them a raked appearance, the rake of their aft edges being represented by white paint; black cowls adorned their tops. A long spar passed to starboard of the funnels representing a voice-pipe from the bridge to the aft conning position, while others formed tripod legs for the masts — *Manxman's* own being painted white, as were the pom-pom, searchlights, yards and crow's nest. *Manxman* was flush-decked, *Léopard's* fo'csle broke abaft the bridge; so false bulwarks of canvas were added forward, and an area of the hull and superstructure from the foremast to the stern was painted black. To complete the disguise, the crew were dressed in French uniforms; a *Tricouleur* flew from the gaff, and the ship's cat wore another! A sketch of the disguise is given here; it would make a very interesting model. (It should be stressed that this *was* a minelaying operation; despite the historical note on the Airfix instruction sheet, landing spies did not come into it).

Four years later, after her torpedo damage had been repaired, *Manxman's* appearance had altered in minor details as a photograph shows. Screens were fitted to her pom-pom; twin 20 mm guns replaced her searchlights and MGs, and she carried more warning radar. The pom-pom was controlled by a small director just abaft the mainmast, with a two-pronged Type 282 radar aerial. Still light grey with dark grey decks, she now had a medium blue panel on the hull sides, from 'A' to 'Y' gun muzzles; in the shadow of the forward 20 mm gun platforms was a white area, easily seen on the photograph.

The description of *Manxman* as built will cover any of the original group of four at the same period; but even if — as rarely happens — ships are identical when built, they never remain so for long. Anti-aircraft armament is often the first to change, not to mention radar arrangements, colour schemes and a hundred and one little details. *Welshman* is the ship drawn, as she appeared in the summer of 1942, before her last refit. By that time her inadequate 0.5 inch MGs had gone, their place being taken by a single 20 mm Oerlikon gun each side; four more of these weapons were sited on the aft superstructure, and one centrally on the searchlight platform. The aft superstructure was also extended forward to the third funnel. In July 1942 her colour scheme was as given for the early *Manxman*; but since she was then being used for fast, lone supply runs to Malta, she had also briefly been disguised as a French cruiser. This was a simplified version of the disguise used by *Manxman*; a black panel was painted on the hull, and the appearance of the funnels was altered, both as shown on the *Manxman* sketch. After her refit in October *Welshman* reverted to the four-colour camouflage she had worn early in the year, similar to *Abdiel's*, but was sunk in the following February. The layout and camouflage of *Abdiel* at that time are superbly depicted on the centre spread of *Warship Profile 38*, than which the ambitious modeller need look no further for inspiration.



Top: Welshman *later in 1942 when 20 mm guns had been fitted. She had meantime been painted light grey then re-camouflaged. However, the colours are faded and the exact pattern difficult to determine (IWM-A13681).*
Above: Apollo *in July 1960 shows the late appearance with twin Bofors mounts aft and many modifications. Note NO1 pennant number (Wright & Logan).*

In September 1943 *Abdiel* was sunk; only *Manxman* survived, but would be under repair on the Tyne for over a year yet. It was, therefore, only possible to continue operations after the delivery of *Ariadne* in October. *Apollo* followed in February 1944. These two ships differed somewhat from their predecessors, and are represented by the Matchbox kit. It is quite possible to convert each kit into one of the other group; for this the drawings will give adequate information, provided that allowance is made for their differing scales.

Principally, the revision of the design lay in the aft superstructure, both parts of which extended further forward in the final pair; while the pom-pom and its platform were replaced by a twin 40 mm mounting on each side, supported by stanchions from the main deck. This, the Hazemeyer gun, was the most advanced ship-borne AA weapon available; it had fast, power-operated elevation and training, a high rate of fire, and its own tracking radar — the little two-pronged fork set above the breech, shown on the drawing of *Apollo*. They can be constructed from fine rod and card, with a lot of care to produce two identical mounts. A nice version of these is provided in the Matchbox kit, requiring only the addition of the radar aerials. The 20 mm guns in that kit, however, are best discarded and new ones made: twin mountings appear superimposed over 'A' and 'Y' guns ('B' gun not being fitted), and each side abreast the foremast and in place of the searchlights. During 1944 two single 20 mm guns were added, sited on new platforms built out from the forward superstructure, in *Apollo*. No other alteration was made at that time, and so these guns and platforms can be included or not, as desired. They were not added to *Ariadne*; the two ships otherwise differed only in that the dark area on the port side of *Apollo* below 'Y' gun was absent from *Ariadne*; and while in *Ariadne* the main colour scheme continued up to the mainmast truck and the top of the foremast tripod, *Apollo's* masts above the funnel tops were black. On both, the fore-

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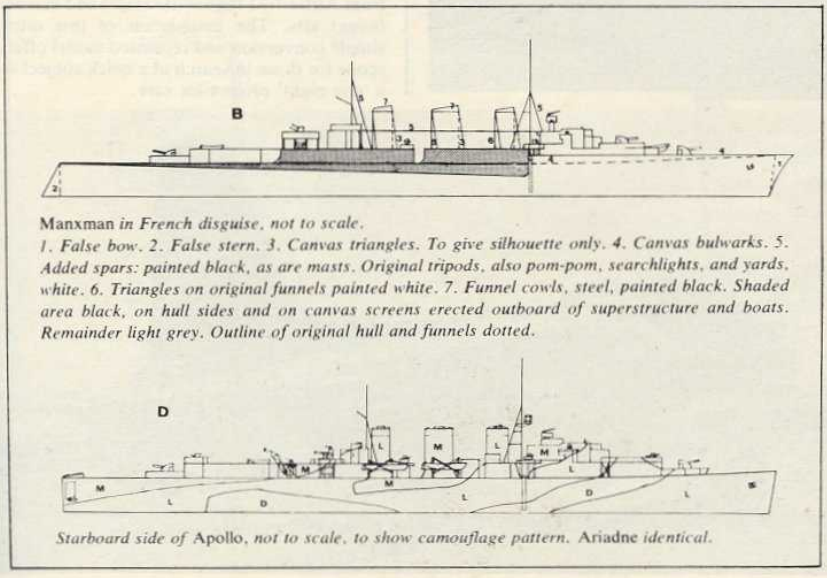

Manxman *in French disguise, not to scale.*
1. False bow. 2. False stern. 3. Canvas triangles. To give silhouette only. 4. Canvas bulwarks. 5. Added spars: painted black, as are masts. Original tripods, also pom-pom, searchlights, and yards, white. 6. Triangles on original funnels painted white. 7. Funnel cowls, steel, painted black. Shaded area black, on hull sides and on canvas screens erected outboard of superstructure and boats. Remainder light grey. Outline of original hull and funnels dotted.

Starboard side of Apollo, *not to scale, to show camouflage pattern.* Ariadne *identical.*

topmast and its radar aerials were white. These aerials are shown on the drawing and the kit box lid; the kit will benefit by their addition.

The forward end of the bridge was of a different shape on these two ships, as were the screens on the gundeck below; the Matchbox kit is correct, except that it lacks the screen at the end of the superstructure just abaft 'A' gun; the Airfix kit, if converted, would require modification in that area. *Ariadne* and *Apollo* also differed from *Manxman* in having far fewer scuttles in the hull sides. Again, it is quite effective to mark these with a pencil, which is also the only way of saving the integrally moulded anchors on the Matchbox kit from near-obscurity. Otherwise, many of the improvements suggested for the *Manxman* kit can profitably be applied here too.

When new, both *Ariadne* and *Apollo* were camouflaged as drawn, the colours being B55 (a very light blue, marked L on the drawing), B30 (medium blue-grey, marked M), and B15, the darkest tone on the photograph of *Ariadne* (dark blue-grey, D). The decks were dark grey. Matchbox recommend a rather different camouflage pattern, which although an official design for it exists (and is shown as Plate 5 of Peter Hodges' *Royal Navy Warship Camouflage 1939-1945*), seems in fact to have been abandoned in favour of the lighter scheme given here.

Apollo continued in service after the war, but her radar and AA armament were modernised by 1954. At that time she carried twin 40 mm Mk 5 mountings in place of the Hazemeyers; for their appearance see the photograph. A single 40 mm gun was mounted each side abreast the foremast; the wing platforms further forward remained, without the 20 mm guns previously sited there, but had been removed by 1960, so are again optional. No 20 mm guns were carried. In 1954 the after part of the aft superstructure was raised by 8 feet; this enlargement of the deckhouse was intended to fit the ship for her new role as a Despatch Vessel. At the same time the platform abaft the second funnel was removed. *Apollo* was then light grey, with green decks (Humbrol HN3), and makes quite an attractive model in this small scale. From 1957, she bore the black pennant number NO1 on the hull sides below the bridge and in smaller characters on the stern. She went to the breakers in 1962.

The following are suggested for further reading: a great deal of historical and technical information is available in A. Cowie, *Mines, Minelayers and Minelaying*, London 1949; *Warship Profile 38, Abdiel-class Fast Minelayers* by Tom Burton, already referred to, can be highly commended. Some exciting accounts of the Fast Minelayers' work are included in Robert K. Dickson, *Naval Broadcasts*, London 1946 (try your local Public Library). Edinburgh readers may also spend happy hours over Dickson's war diaries, which are deposited in the National Library of Scotland. The question of ship-model display is excellently treated by Peter Hodges in *Airfix Magazine Guide 7: Warship Modelling*; and the author is glad to acknowledge that gentleman's kind assistance in establishing the correct camouflage pattern for *Apollo* and *Ariadne*.